

Group II is drawn to a method for forming images using a plurality of developers containing a toner according to Group I.

Where product and process claims are presented in the same application, Applicants may be called upon under 35 U.S.C. §121 to elect claims to either the product or process. MPEP §821.04. However, in the case of an elected product claim, rejoinder will be permitted where a product claim is found allowable and the withdrawn process claim depends from or otherwise includes all of the limitations an allowed product claim. Id. In the present application, the method claims of Group II include all of the limitations of the product of Group I. In particular, all of the limitations of the independent product claim 1 and 11 of Group I are incorporated into the method claims of Group II.

Because the method claims of Group II include the limitations of the product claims of Group I, the method claims must be rejoined with the product claims once the product claims are allowed. Thus to streamline prosecution and avoid delay, the Restriction Requirement should be withdrawn to permit concurrent examination of all pending claims. Applicants respectfully request rejoinder of all pending claims.

The Restriction Requirement is also traversed because the subject matter of Group II is sufficiently related that a search of any one Group would encompass a search of the subject matter of the remaining Group. The prior art revealed by a search of the composition of Group I would overlap the prior art revealed by a search of the method of Group II. Thus, although the classifications may be different, the subject matter is sufficiently overlapping that concurrent search of all of the claims does not create a serious burden.

If the search and examination of an entire application can be made without serious burden, the Examiner must examine it on the merits, even though it includes claims to distinct or independent claims. MPEP §803. Applicants respectfully submit that there would be no serious burden on the Patent Office to examine all of the present claims because the subject matter of Groups I and II is sufficiently related that a search of any one Group would

encompass the search of a subject matter of the other Group. Thus, the Restriction Requirement should be withdrawn.

As discussed at the personal interview with the Examiner, the claims of Group II should be rejoined with the claims of Group I in view of the amendment of claims 1 and 11. Applicants submit that the claims of Group I are allowable over the cited reference for the reasons discussed at the personal interview, as set forth below.

**II. Rejection Under §112, Second Paragraph**

Claims 16 and 17 are rejected under 35 U.S.C. 112, second paragraph, as allegedly being indefinite. In view of the cancellation of claims 16 and 17, Applicants submit that this rejection is moot.

Withdrawal of this rejection is respectfully requested.

**III. Rejections Under §103**

**A. Fujii et al. in View of Komai et al., Further in View of Demizu et al.,  
Still Further in View of Iida et al.**

Claims 1-10 are rejected under 35 U.S.C. §103(a) as allegedly being unpatentable over Fujii et al. (US 4,855,204) in view of Komai et al. (US 6,077,640), further in view of Demizu (US 4,943,506), and still further in view of Iida et al. (US 5,922,500). In view of the cancellation of claim 8, the rejection is moot with respect to that claim. As discussed at the personal interview with the Examiner, Applicants respectfully traverse this rejection as it applies to the remaining claims.

As amended, claim 1, and all claims dependent therefrom, specify that the ratio of white color toner particles having a toner diameter of no greater than 4  $\mu\text{m}$  is 6 to 25% by number with respect to the total number of white toner particles. Although Fujii teaches a white toner containing a fixing resin and a titanium dioxide pigment dispersed in the fixing resin as a colorant, the reference fails to teach or suggest the claimed ratio of white color toner particles having a diameter of no greater than 4  $\mu\text{m}$ . The additional citation of Komai,

Demizu and Iida by the Office Action fails to cure this deficiency in the teachings of Fujii. Thus, one of ordinary skill in the art would not have been able to derive the claimed invention based on the teachings of the cited references.

Furthermore, Demizu expressly teaches the removal of fine and coarse particles from the toner so that the white toner comprises particles between 5-25  $\mu\text{m}$  (see Demizu, col. 6, lines 50-57). Thus, the reference teaches away from the inclusion of particles having the claimed diameter in a white toner. Applicants submit that the other references cited in the rejection are silent with respect to the preferred particle size. As such, one of ordinary skill in the art would not have been motivated to use particles of the claimed size and in the claimed amount based on the teachings of the cited references, in view of the teachings of Demizu. Instead, the combination of the cited references would have led one of ordinary skill in the art to include white toner particles having a particle diameter between 5-25  $\mu\text{m}$ .

For at least these reasons, claims 1-10 would not have been obvious over the cited references. Reconsideration and withdrawal of the rejection are respectfully requested.

**B. Fujii or Demizu, Each in View of Sato et al.**

Claims 11-13 are rejected under 35 U.S.C. §103 over Fujii or Demizu, each in view of Sato et al. (US 5,518,849). As discussed at the personal interview with the Examiner, Applicants respectfully traverse this rejection.

The Office Action cites and applies each of Fujii and Demizu for teaching a white toner having a binder resin and white colorant in the specified amounts as well as an average particle diameter as claimed. However, the Office Action admits that neither of Fujii nor Demizu teaches a fluoro-resin coating for the carrier or the electrical resistance of the core. To cure this deficiency in the teachings of Fujii and Demizu, the Office Action cites Sato.

However, as amended, claim 11, and all claims dependent therefrom, specifies that the ratio of white color toner particles having a particle diameter of no greater than 4  $\mu\text{m}$  is 6 to 25% with respect to the total number of white toner particles. Neither Fujii nor Demizu

teach or suggest this feature of the claimed invention. The additional citation of Sato et al. fails to cure this deficiency in the teachings of either Fujii or Demizu. Thus, one of ordinary skill in the art would not have been able to derive the claimed invention based on the teachings of the cited references.

Furthermore, Demizu expressly teaches the removal of fine and coarse particles from the toner so that the white toner comprises particles between 5-25  $\mu\text{m}$  (see Demizu, col. 6, lines 50-57). Thus, the reference teaches away from the inclusion of particles having the claimed diameter in a white toner. Applicants submit that the other references cited in the rejection are silent with respect to the preferred particle size. As such, one of ordinary skill in the art would not have been motivated to use particles of the claimed size and in the claimed amount based on the teachings of the cited references, in view of the teachings of Demizu. Instead, the combination of the cited references would have led one of ordinary skill in the art to include white toner particles having a particle diameter between 5-25  $\mu\text{m}$ .

For at least these reasons, Applicants submit that claims 11-13 would not have been obvious over the references cited. Reconsideration and withdrawal of this rejection are respectfully requested.

**C. Fujii or Demizu et al., Each in View of Vail**

Claims 14 and 15 are rejected under 35 U.S.C. §103(a) over Fujii or Demizu, each in view of Vail (US 5,994,015). As discussed at the personal interview with the Examiner, Applicants respectfully traverse this rejection.

The Office Action cites and applies Demizu as discussed in the rejection above. However, the Office Action admits that the references fail to disclose a fluoro-resin coating for the carrier, particularly where the fluoro-resin coating contains an electrically conductive particle dispersed therein. To cure this deficiency in the teachings of Fujii and Demizu, the Office Action cites Vail.

However, claims 14 and 15 both depend from claim 11 either directly or indirectly. Thus, as discussed in the rejection above, claims 14 and 15 also require the inclusion of a ratio of white color toner particles having a particle diameter of no greater than 4  $\mu\text{m}$  of 6 to 25% with respect to the total number of white toner particles. None of the references cited teaches or suggests the inclusion of the specified ratio of white color toner particles having the specified minimum diameter. Thus, one of ordinary skill in the art would not have been able to derive the claimed invention based on the teachings of the cited references.

Furthermore, Demizu expressly teaches the removal of fine and coarse particles from the toner so that the white toner comprises particles between 5-25  $\mu\text{m}$  (see Demizu, col. 6, lines 50-57). Thus, the reference teaches away from the inclusion of particles having the claimed diameter in a white toner. Applicants submit that the other references cited in the rejection are silent with respect to the preferred particle size. As such, one of ordinary skill in the art would not have been motivated to use particles of the claimed size and in the claimed amount based on the teachings of the cited references, in view of the teachings of Demizu. Instead, the combination of the cited references would have led one of ordinary skill in the art to include white toner particles having a particle diameter between 5-25  $\mu\text{m}$ .

For at least these reasons, Applicants submit that claims 14 and 15 would not have been obvious over the cited references. Reconsideration and withdrawal of the rejection are respectfully requested.

**D. Fujii or Demizu, Each in View of Shibuya et al.**

Claims 14 and 15 are also rejected under 35 U.S.C. §103(a) as being allegedly unpatentable over Fujii or Demizu, each in view of Shibuya (US 5,821,023). As discussed at the personal interview with the Examiner, Applicants respectfully traverse this rejection.

Fujii and Demizu are applied as discussed above. The Office Action admits that neither Fujii nor Demizu teaches a fluoro-resin coating for the carrier, particularly, where the

fluororesin coating contains a thermosetting resin. To cure this deficiency in the teachings of Fujii and Demizu, the Office Action cites Shibuya.

However, Applicants submit that this rejection fails for the same reasons discussed in the rejection of claims 14 and 15 over Fujii or Demizu, each in view of Vail. In particular, claims 14 and 15 both require a ratio of white color toner particles having a particle diameter of no greater than 4  $\mu\text{m}$  being 6 to 25% with respect to the total number of white toner particles. None of the cited references teach or suggest this feature of the claimed invention.

Furthermore, Demizu expressly teaches the removal of fine and coarse particles from the toner so that the white toner comprises particles between 5-25  $\mu\text{m}$  (see Demizu, col. 6, lines 50-57). Thus, the reference teaches away from the inclusion of particles having the claimed diameter in a white toner. Applicants submit that the other references cited in the rejection are silent with respect to the preferred particle size. As such, one of ordinary skill in the art would not have been motivated to use particles of the claimed size and in the claimed amount based on the teachings of the cited references, in view of the teachings of Demizu. Instead, the combination of the cited references would have led one of ordinary skill in the art to include white toner particles having a particle diameter between 5-25  $\mu\text{m}$ .

For at least these reasons, Applicants submit that claims 14 and 15 would not have been obvious over the combinations of Fujii and Demizu, each in view of Shibuya. Reconsideration and withdrawal of the rejection are respectfully requested.

#### **IV. Conclusion**

In view of the foregoing amendments and remarks, Applicants submit that this application is in condition for allowance. Favorable reconsideration and prompt allowance of pending claims are earnestly solicited.

Should the Examiner believe that anything further would be desirable in order to place this application in better condition for allowance, the Examiner is invited to contact Applicants' undersigned representative at the telephone number set forth below.

Respectfully submitted,



James A. Oliff  
Registration No. 27,075

Stephen Tu  
Registration No. 52,304

JAO:SXT/ldg

Attachment:  
Appendix

Date: February 27, 2003

**OLIFF & BERRIDGE, PLC**  
**P.O. Box 19928**  
**Alexandria, Virginia 22320**  
**Telephone: (703) 836-6400**

**DEPOSIT ACCOUNT USE  
AUTHORIZATION**

Please grant any extension  
necessary for entry;  
Charge any fee due to our  
Deposit Account No. 15-0461

## APPENDIX

## Changes to Claims:

Claims 8, 16 and 17 are canceled.

The following is a marked-up version of the amended claim(s):

1. (Amended) A toner for developing an electrostatic latent image comprising:

a white color toner particle containing at least a binder resin and a colorant, with the particle having a volume average particle diameter of no greater than 14  $\mu\text{m}$  and a concentration of the colorant being 20 to 50% by weight with respect to the binder resin,

wherein a ratio of white color toner particles having a particle diameter of no greater than 4  $\mu\text{m}$  is 6 to 25% by number with respect to the total number of the white toner particles; and

an external additive containing a hydrophobic titanium oxide particle having a BET specific surface area of 40 to 250  $\text{m}^2/\text{g}$ ;

wherein the absolute charge value of the toner is 20 to 50  $\mu\text{C/g}$ .

11. (Amended) A developer for electrostatic latent images, which comprises:

a toner for developing an electrostatic latent image comprising a white color toner particle containing at least a binder resin and a colorant, with the particle having a volume average particle diameter of no greater than 14  $\mu\text{m}$  and a concentration of the colorant being 20 to 50% by weight with respect to the binder resin, wherein a ratio of white

color toner particles having a particle diameter of no greater than 4  $\mu\text{m}$  is 6 to 25% by number with respect to the total number of the white toner particles; and

a carrier, with the carrier having a surface coated with a resin containing a fluoro-resin.

18. (Amended) A method for forming images using a plurality of developers to form a multicolored image, comprising the steps of:

charging a photoreceptor;



forming an electrostatic latent image by exposing the photoreceptor surface;  
forming a white toner image by developing the electrostatic latent image  
using a developer containing a toner according to claim 1;  
transferring said white color toner image onto a transfer body;  
forming a black toner image by developing an electrostatic latent image  
using a ~~development~~-developer containing a toner comprising a black color toner particle  
having a colorant concentration of 4 to 15%; and  
transferring the black color toner image onto a transfer body.

19. (Amended) A method for forming images using a plurality of developers to form  
a multicolored image, comprising the steps of:

charging a photoreceptor;  
forming an electrostatic latent image by exposing the photoreceptor surface;  
forming a white toner image by developing the electrostatic latent image  
using the developer according to claim 11;  
transferring said white color toner image onto a transfer body;  
forming a black toner image by developing an electrostatic latent image  
using a ~~development~~-developer containing a toner comprising a black color toner particle  
having a colorant concentration of 4 to 15%; and  
transferring the black color toner image onto a transfer body.